

IN THE CLAIMS

*The status of the claims as presently amended is as follows:*

1-10. (Canceled)

11. (New) An image forming apparatus comprising:

a program module adapted to control a scanner engine to carry out a scanning process and a printer engine to carry out a printing process;

a storage unit adapted to obtain, from an external apparatus, license information of the program module and store the license information, the license information including a total number of print surfaces the program module is allowed to process and a total number of original surfaces the program module is allowed to process;

a counting unit adapted to count up values of used resources of the program module, the values being managed in a table, wherein when the program module controls the scanner engine to carry out the scanning process, the counting unit counts up a total number of original surfaces scanned, while when the program module controls the printer engine to carry out the printing process, the counting unit counts up a total number of print surfaces printed in the printing process;

a determining unit adapted to determine that the license information is invalid when the total count value of the surfaces scanned by the scanning process counted up by the counting unit exceeds the total number of the original surfaces included in the license information or when the total count value of the surfaces printed by the printing process counted up by the counting unit exceeds the total number of print surfaces included in the license information; and

a changing unit adapted to change a setting for starting the program module so that the program module does not start when the controller of the image forming apparatus is started, in the case where the determining unit determines that the license information invalid to disable the program module.

12. (New) A license managing system comprising:

an image forming apparatus having a controller and a program module, wherein the program module is adapted to control a scanner engine to carry out a scanning process and a printer engine to carry out a printing process; and

an information processing apparatus,

wherein the information processing apparatus comprises:

a setting unit adapted to set a licensing condition as a condition of the program module installed in the image forming apparatus;

an encrypting unit adapted to encrypt the licensing condition set by the setting unit using a public key to generate license information, including information for identifying the program module installed in the image forming apparatus, apparatus identifying information for identifying the image forming apparatus, and the encrypted licensing condition, wherein the license information further includes a total number of print surfaces the program module is allowed to process and a total number of original surfaces the program module is allowed to process; and

a first storage unit adapted to store the license information;

wherein the image forming apparatus comprises:

a designating unit adapted to receive an instruction from a user to designate a storage destination of the license information stored in the first storage unit based on the received instruction;

an obtaining unit adapted to obtain based on the designated storage destination, the license information from the information processing apparatus;

a decrypting unit adapted to decrypt the encrypted licensing condition included in the license information stored in the first storage unit using a secret key;

a second storage unit adapted to store the license information including the decrypted licensing condition;

a changing unit adapted to change a setting for starting the program module so that the program module starts when the controller of the image forming apparatus is started, in the case where the apparatus identifying information included in the license information stored in the second storage unit identifies the image forming apparatus, and the information for identifying the program module included in the license information identifies the program module installed in the image forming apparatus;

a counting unit adapted to count up, when the changing unit changes the setting for starting the program module so that the program module starts when the controller of the image

forming apparatus is started, values of used resources of the program module, the values being managed in a table, wherein when the program module controls the scanner engine to carry out the scanning process, the counting unit counts up a total number of original surfaces scanned, while when the program module controls the printer engine to carry out the printing process, the counting unit counts up a total number of print surfaces printed in the printing process; and

a determining unit adapted to determine that the license information is invalid when the total count value of the surfaces scanned by the scanning process counted up by the counting unit exceeds the total number of the original surfaces included in the license information or when the total count value of the surfaces printed by the printing process counted up by the counting unit exceeds the total number of print surfaces included in the license information,

wherein the changing unit changes the setting for starting the program module so that the program module does not start when the controller of the image forming apparatus is started, in the case where the determining unit determines that the license information is invalid to disable the program module.

13. (New) A method of managing license information in a managing system comprising an information processing apparatus having a first storage unit, and an image forming apparatus having a controller, a second storage unit, and a program module, wherein the program module is adapted to control a scanner engine to carry out a scanning process and a printer engine to carry out a printing process, the method comprising:

a setting step of setting, with the information processing apparatus, a licensing condition as a condition of the program module installed in the image forming apparatus;

an encrypting step of encrypting, with the information processing apparatus, the licensing condition set in the setting step using a public key to generate license information, including information for identifying the program module installed in the image forming apparatus, apparatus identifying information for identifying the image forming apparatus, and the encrypted licensing condition, wherein the license information further includes a total number of print surfaces the program module is allowed to process and a total number of original surfaces the program module is allowed to process;

a first storing step of storing the license information in the first storage unit of the information processing apparatus;

a designating step of receiving, with the image forming apparatus, an instruction from a user to designate a storage destination of the license information stored in the first storage unit based on the received instruction;

an obtaining step of obtaining, with the image forming apparatus, based on the designated storage destination, the license information from the information processing apparatus;

a decrypting step of decrypting the encrypted licensing condition included in the license information stored in the first storage unit using a secret key;

a second storing step of storing the license information including the decrypted licensing condition in the second storage unit of the image forming apparatus;

a changing step of changing, with the image forming apparatus, a setting for starting the program module so that the program module starts when the controller of the image forming apparatus is started, in the case where the apparatus identifying information included in the license information stored in the second storage unit identifies the image forming apparatus, and the information for identifying the program module included in the license information identifies the program module installed in the image forming apparatus;

a counting step of counting up, with the image forming apparatus, when the changing step changes the setting for starting the program module so that the program module starts when the controller of the image forming apparatus is started, values of used resources of the program module, the values being managed in a table, wherein when the program module controls the scanner engine to carry out the scanning process, the counting step counts up a total number of original surfaces scanned, while when the program module controls the printer engine to carry out the printing process, the counting step counts up a total number of print surfaces printed in the printing process; and

a determining step of determining, with the image forming apparatus, that the license information is invalid when the total count value of the surfaces scanned by the scanning process counted up in the counting step exceeds the total number of the original surfaces included in the license information or when the total count value of the surfaces printed by the printing process counted up in the counting step exceeds the total number of print surfaces included in the license information,

wherein the changing step changes the setting for starting the program module so that the program module does not start when the controller of the image forming apparatus is

started, in the case where the determining step determines that the license information is invalid to disable the program module.